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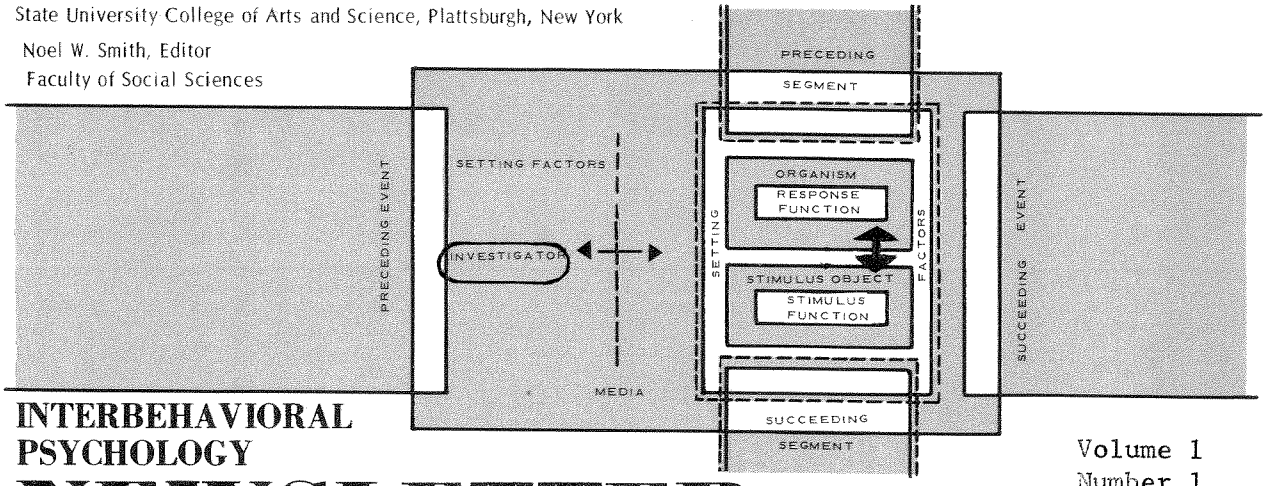

INTERBEHAVIORAL PSYCHOLOGY NEWSLETTER

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"...the psychological investigative event constitutes the interbehavior of the investigator with a behavior segment or psychological event...Just as the event investigated is conditioned by the interbehavioral history of the organism and object, so the investigator is influenced by his antecedent intellectual background." -- J. R. Kantor

A Toast

The soul may be a mere pretense,
the mind makes very little sense
So let us value the appeal
Of that which we can taste and feel.

Piet Hein (Grooks, MIT Press, 1966)

NEWS AND NOTES

It is a primary hope that the inauguration of this Newsletter will help to promote an interest in the development and dissemination of objective approaches to psychology and will facilitate efforts toward that end, especially in communication and coordination. You are invited and urged to send in any pertinent information, questions, requests, etc. as indicated in the prospectus.

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The design of the Newsletter is an adaptation of one in Kantor's "Toward a Scientific Analysis of Motivation," Psychological Record, 1942, 5, 225-275. The accompanying quotation is from the same source. The indication of media was omitted and the arrow off center in the vertical segments and "field" is nowhere to be found. If you can bear with these inaccuracies until the supply of face sheets is used up, we can make the corrections or use an entirely new design that anyone is willing to provide.

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Rollo Handy is correcting galley proofs for his new The Measurement of Value. He argues "for construing valuation as a field process involving both the organism and the environment, and against views that attempt to account for valuing transactions in terms of the person isolated from an environmental setting or that postulate a supernatural or nonnatural locus for values" (personal communication). Examination copies of Pronko's new Panorama of Psychology can be obtained from Brooks/Cole, 10 Davis Drive, Belmont, Calif. 94002. (This book has met with overwhelming enthusiasm by my students--ed.) Lundin's Personality: A Behavioral Approach Macmillan, 1969, is an interbehavioral-operant approach.

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Stan Ratner reports that Michigan State University has a graduate program in comparative psychology with heavy emphasis in interbehavior of organism as illustrated in Denny & Ratner's Comparative Psychology, rev. ed.

State University of New York at Plattsburgh has a two-year school psychology program (M.S.) with emphasis on scientist first and practitioner second with exposure to interbehavioral and operant approaches; M.A. in experimental and personality-clinical probably fall 1970. Also faculty opening in experimental and in personality.

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The second annual meeting of The International Society for the History of the Behavioral and Social Sciences (ISHOBSS) will be held at the University of Akron, home of the psychology archives. Information on the meeting is available from Dr. John A. Popplestone, Department of Psychology, University of Akron, Akron, Ohio 44304 and on membership from Barbara Ross, Psychology Department 003, University of Massachusetts-Boston, 100 Arlington Street, Boston, Mass. 02116. Several persons interested in interbehavioral psychology are associated with the organization. It would be a good opportunity for those of us in the East and Midwest to meet. Date: May 8-10, 1970.

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Among the inclusions in the next issue will be a criticism of the establishment of the Newsletter and an argument that a distinction between interbehaviorism and behaviorism is mythical--an account of the awards given by the Division of Clinical Psychology of the American Psychological Association in 1968 to two interbehavioral psychologists: Jerry Carter and Julian Rotter--the telegram sent to Dr. Kantor by the participants of the summer conference (below) and his reply.

REPORT

The Summer Community of Scholars
June 16-21, 1969
The Emerging Role of Interbehavioral Psychology

Excerpts from the printed programs:

Psychologists working in teaching, research, and applied settings will meet together for a week of seminars and lectures related to their interest in interbehavioral approaches that underlie their diverse specialities. The seminars are for the purpose of exchanging ideas around some topic of special interest to the discussion leader of the day. The leader may open with a short, tentative paper or a talk (15 to 20 minutes) on an area of research in which he is currently involved. The lectures and seminars are open to all interested persons.

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Interbehavioral psychology was formulated fifty years ago by J.R. Kantor who is still continuing its development. He has often been decades ahead of his colleagues in such topics as motivation, instincts, intelligence, language behavior, physiological psychology, perception, covert or implicit behavior, numerous logical problems of psychology, and even what constitutes psychology. Interbehavioral psychology has been a rather subtle but definite influence and within the past decade has shown signs of rapidly increasing importance as evidenced by the number of books and papers related to or utilizing this approach and the rise in citations; the compatibility with operant conditioners is especially significant.

The basic assumption of interbehavioral psychology is that the datum of psychology is the organism interacting or interbehaving with a stimulus object via media of contact in some particular setting or context. These factors together make up the interbehavioral field. Psychological activity then is not localizable in nor reducible to any single organ nor even the entire organism but is constituted by the entire field of events. There is here neither "empty organism" not physiological reductionism. Nor is there any postulation of special powers such as "mind" or "will" or animistic brain powers that reside inside the organism nor assumptions of vectors or forces outside the organism that control it. Neither is there any borrowing of analogies from

inanimate machins or computers nor from physics, chemistry, or biology. Rather, the psychological event is treated as the development of complex but concrete interactions of organism and objects through the various media of contact, such as light and sound, in space-time dimensions.

Each of the participants in the program will present his own specialized area of psychology within the orientation of interbehavioral psychology.

Participants: Samuel Campbell, Texas Technological University; Paul Fuller, Lear/Siegler Co., Grand Rapids, Mich.; Louise Kent, Program Director, Fort Custer State Home, Augusta, Mich.; Neil Kent, Western Michigan University; Wayne Lazar, Institute of Animal Behavior, Rutgers University; Paul Mountjoy, Western Michigan University; Noel Smith, State University of New York at Plattsburgh. Formal papers: Wayne Lazar--A comparison of some of the theoretical positions of J.R. Kantor and T.C. Schneirla; Louise Kent--A Kantorian analysis of language and its implications for first language acquisition; Paul Mountjoy--Animal behavior technologies and the history of psychology; Paul Fuller--The relationship between interbehavioral psychology and system engineering.

Some Thoughts on the Summer Community of Scholars, 1969-- State University of New York/Miner Foundation

Paul Fuller

The outstanding impression I came away with is that Miner Institute provides an ideal setting for conferences of this type. Quiet and rustic surroundings provide a minimum of distractions. Facilities are adequate but not lavish--conducive to thought, contemplation, scholarship, and stimulating discussion.

There was also the overall impression which confirmed a contention I have made for over twenty years: Interbehavioral psychology provides the systems framework in which psychologists can effectively work in every conceivable type of behavioral field. At the conference were people studying all types of human and animal behavior problems, including astronauts, ants, and falcons. There were those involved in verbal behavior, special cases of language development, all phases of clinical psychology, executive selection and development, man/machine systems, selection and training of outstanding groups such as astronaut teams, and information processing systems which involve command and control. The Interbehavioral approach enables the psychologist to approach scientifically new problems, new data, new combinations.

I was also struck with the parallel in development of interbehavioral psychology and systems engineering, systems management, and system analysis in the 1950's and 1960's. Some of this development was influenced by Kantor students such as Burt Wolin, John Fink and myself.

It is my opinion that recent developments in mathematics, optimal control theory, computer technology and system science should now be fed back to systematic psychology. These techniques will further mensuration in a more detailed field analysis and experimental study of interbehavioral field events.

THE SIGNIFICANCE OF THE STIMULUS FUNCTION

P. E. Lichtenstein
Denison University

In 1920 the behavioristic revolution was still very much in the air. Kantor was one of several psychologists who at that time saw much that was promising in behaviorism. Yet Kantor already had found Watson's formulation of stimulus-response psychology inadequate in certain respects. At times Watson used the term stimulus crudely to refer simply to the object responded to. At other times in an attempt at a more scientific formulation the behaviorists fell back upon the earlier mentalistic account of the stimulus as a physical energy impinging a receptor organ. Kantor did not find either usage capable of yielding an adequate account of complex behavior. He therefore began to work out a functional conception of the stimulus correlated with a response function.

Stimulus functions and response functions are seen as distinct from biological stimuli and responses and as being evolved in the course of what Kantor now refers to as the interbehavioral history. Stimulus functions are elaborated on the side of the objects or events responded to and response functions on the side of the organism. Stimulus functions are clearly connected with stimulus objects but the two must not be confused. Similarly response functions are not simply biological reactions or movements even though without such biological participation there can be no psychological event. Response functions, like stimulus functions, are field components evolved through contacts of the organism with stimulus objects.

Kantor (1933) made an impressive defense of stimulus-response psychology in reaction to challenges to the S-R conception by such writers as Woodworth, Thurstone, and Kluver. Kantor saw no reason to abandon the S-R concept but rather an opportunity to modify it along interbehavioral lines. This paper was described by Griffith (1943) as the clearest defense of S-R psychology and Skinner (1938) commented that Kantor had shown the impossibility of defining "a functional stimulus without reference to a functional response, and vice versa." Even so Kantor's approach had less impact upon psychology than ought to have been the case. It is interesting to conjecture as to why this was so and an examination of some of the possible reasons should be profitable.

The traditional physiological stimulus had the characteristics of being manipulable and measurable in physical terms. The stimulus could therefore be readily employed as an independent variable in scientific investigation. Stimuli (light rays) impinge upon sensitive receptor cells (rods and cones) in such a manner as to initiate neural impulses which are carried along the optic nerve to the visual cortex. As a result of brain action there may occur sensations or perceptions (mental activities?) and eventually an effector response. This sequence assumes the operation of causality of a traditional "billiard ball" type. The stimulus operates in a pre-psychological manner and the significance of the stimulus (in a psychological sense) is to be understood by reference to the mental reaction which creates its significance (mentalism), or in the response without reference to a mental event (behaviorism). Kantor broke with tradition when he made the stimulus an essential part of the psychological event rather than a preceding cause. Because Kantor's approach involved a conception of causation in psychology at variance with that generally accepted and widely taught, it has not had the ready acceptance that its merits should have warranted.[1] The interbehavioral field and more particularly the stimulus function have been poorly understood and their revolutionary implications too often ignored or certainly not fully appreciated.

[1] A good discussion of causation may be found in Lerner (1965). See especially the articles by Nagel, Mayr, and Parsons.

The stimulus function is, of course, a scientific construct derived from the behavior of an organism observed to be, or assumed to be, in contact with some object or event. In a sense it is improper to discuss the stimulus function apart from its correlated response function since it is the interaction of these two factors which constitutes the central focus of an interbehavioral or psychological event. When we discuss the stimulus function in isolation we must regard it as simply an analytical abstraction. In a recent formulation Kantor (1959) described the psychological event by the following formula: PE = C (k, sf, rf, hi, st, md) where k symbolizes the uniqueness of interbehavioral fields and C that the field consists of the entire system of factors in interaction. Sf refers to the stimulus function, rf the response function, hi the historical interbehavior process in which are generated the stimulus function and response function, st setting factors and md media of contact such as light or air.

Kantor's interbehavioral event by bringing physical, biological, cultural, and historical factors into system represents a field approach to psychology quite different from traditional causal conceptions. The psychological event is seen to consist of a constellation of interacting factors rather than as a mental or biological dependent variable caused by antecedent physical events. Kantor, by making the stimulus itself a part of the psychological event provides an alternative to both reductionistic behaviorism and phenomenology. This is a difficult point for many to grasp for reasons we have discussed. Physicalists tend to see the stimulus function as a non-naturalistic factor while phenomenologists prefer to interpret it in terms of internal mechanisms such as the isomorphism of Gestalt psychology. The inability to appreciate Kantor's view as an alternative to reductionistic behaviorism and phenomenology is clearly revealed in a recent article by Thornton (1969) which discusses Kantor's interpretation of Socrates.

Many psychologists make practical use of data from the life history but Kantor appears to be the first to bring history into the theoretical structure in a significant way. He is able to do this because he is not beholden to a physicalistic theory of causation. The writer (1950) has discussed at length the reductionistic problem and the bias against geneticism in psychology.

The experimental psychologist may properly ask what happens under an interbehavioral point of view to the elaborate procedures which have been developed for systematically varying the physical stimulus (independent variable) and observing accurately the effect upon the subject's response (dependent variable) as has been done perhaps most clearly in the typical psychophysical experiment. Kantor's (1959) answer is clear. Procedures under which the stimulus object is regarded as an independent variable are "only operationally justified." "R = f (S) is....a pragmatic device." The same holds true even when additional factors such as the condition of the organism are taken into account. Under controlled conditions certain regularities may be found in behavior. Absolute and differential thresholds may be established, effects of reinforcement schedules determined and the like. In such instances the experimental procedure and the observed regularity may be taken as special cases falling within a wider interbehavioral frame of reference. Nothing in such situations should be taken as a basis for misreading the general nature of psychological stimulation. Uniformities in response to physical properties of stimuli under rigid conditions

of control do not negate the interbehavioral concept of the stimulus as function. Outside the experimental situation behavior is generally found to be considerably more variable and responsive to a greater variety of conditions. Consequently under such conditions the physical definition of the stimulus tends to be less useful. 2

It is sometimes said that the stimulus function has only postdictive but not predictive value. How, for example, can one predict from a variable which is not independently observable? The clue to an answer lies in the interbehavioral history. When this (i.e. a set of previously elaborated sf - rf correlations) is reasonably well understood one can predict quite well what the stimulus-response function for an individual will be in a given situation. Even small children are able to predict fairly accurately the effects of their own verbal behavior on their parents.

Stimulus objects are important and the study of their physical, biological, and cultural properties often sheds light upon their role in psychological events. Stimulus functions are not synonymous with these properties which may be regarded as independent of particular psychological interactions. The view which makes stimulus objects into objects known or creations of the mind stems from the causal theory which is set aside by an interbehavioral construction.

It has been suggested that the stimulus function is a scientific construct which has revolutionary implications. It permits the development of a psychology which neither reduces psychological activities to the biological responses of organisms nor holds them to be functions of an immaterial mind. Furthermore, it allows us to gain considerable understanding of complex behaviors as they develop through an intricate and detailed interbehavioral history. When we cling to the physical or physiological definition of stimulus we may feel constrained to restrict investigation to those behaviors for which such constructs appear most appropriate.

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2. For an interesting discussion of some of the same points see Campbell (1969).

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